



Patent US 201C2
Attorney Docket: 161,700-040
(formerly 270/236)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

BARBUT, Denise

Serial No.: 10/052,688

Filed: January 18, 2002

For: PARTIAL AORTIC OCCLUSION DEVICES
AND METHODS FOR CEREBRAL
PERFUSION AUGMENTATION

Group Art Unit: 3763

Examiner: Michael M. Thompson

DECLARATION OF JOYCE A. WAHR, M.D.

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Joyce A. Wahr, M.D., do declare that:

1. I was an Associate Professor in the Department of Anesthesiology, University of Michigan Medical Center, until May 16, 2003. I received a M.D. from the University of Colorado, Boulder, Colorado, in 1978. I am a consultant to CoAxia, Inc., the assignee. Other than my consulting relationship, I have no financial interest in CoAxia or in this patent application.

2. I have reviewed U.S. Application Serial No. 10/052,688.

3. I have reviewed U.S. Patent No. 5,116,305 to Milder et al ("the '305 patent").

4. The '305 patent concerns intra-aortic balloon pumping (IABP) devices.

5. In my capacity as a Cardiac Anesthesiologist, I am familiar with the use of intra aortic balloon pumps to augment the hearts pumping action.

6. In IABP, volume displacement is a critical feature. The length of the balloon is a critical feature for IABP because the volume displaced is directly proportional to length. In order to achieve adequate volume displacement, balloons used for IABP are typically 10 cm or longer.

7. Based on my review, I believe that a person skilled in IABP would find it counterintuitive, and in fact counterproductive, to shorten the balloon described in Milder et al. in light of the need to provide sufficient volume displacement. Conventional wisdom in IABP teaches that volume displacement is linked to balloon length. Any shortening of the balloon would decrease efficiency of the IABP procedure and would therefore be avoided.

8. Contrary to IABP, the present invention makes use of a balloon length of 3-6 cm. This shorter balloon, as compared to a balloon with a length of 10 cm, does not block vessels branching from the aorta, and therefore represents a significant improvement as compared with the use of a longer IABP balloon.

9. I further declare that all statements made in this Declaration of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent and application involved in the present proceedings.

Dated: Jan 28, 05



Joyce A. Wahr, M.D.